## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 2 June 2005 (02.06.2005)

PCT

## (10) International Publication Number WO 2005/049651 A2

- (51) International Patent Classification7: C07K 14/82, 14/705, 16/32, C12N 5/12, G01N 33/574, A61K 39/395, C12N 15/11, A61P 35/00
- (21) International Application Number:

PCT/GB2004/004788

(22) International Filing Date:

15 November 2004 (15.11.2004)

(25) Filing Language:

**English** 

(26) Publication Language:

**English** 

(30) Priority Data:

0326578.2

14 November 2003 (14.11.2003) GB

- (71) Applicant (for all designated States except US): THE QUEEN'S UNIVERSITY OF BELFAST [GB/GB]; University Road, Belfast BT7 1NN (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MULLIGAN, Karl [GB/GB]; 9 Ardenlee Court, Ravenhill Road, Belfast BT6 8QE (GB). MCCORMICK, Derek [GB/GB]; 25 Greystown Park, Upper Malone, Belfast Bt9 6UP (GB). JOHNSTON, Patrick [GB/GB]; 10 Graland Hill, Four Winds, Belfast BT8 6IL (GB).

- (74) Agent: PURDY, Hugh, Barry; Murgitroyd & Company Limited, Scotland House, 165-169 Scotland Street, Glasgow G5 8PL (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CANCER DIAGNOSIS AND THERAPY

(57) Abstract: The invention relates to an oncofetal glycoprotein, referred to as MQ-1, nucleic acid sequences coding for the protein, and antibodies which bind specifically to the protein. Also described is a hybridoma capable of producing monoclonal antibodies which bind specifically to the protein of the invention. Methods, and kits, for diagnosing and treating cancer using the antibodies of the invention are also described. Anti-sense polynucleotides are also described, as are methods for inducing apoptosis in cells which express MQ-1.